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Title of the Invention Water-in-oil type emulsification make-up material

【Summary of the Invention】

【Purpose】 The present invention has for its purpose to provide a water-in-oil type emulsification make-up material where the emulsifying contents are stable even at high temperatures, the "elongation" on skin is light and the material is not sticky. Further, there is no secondary adherence of the formulated powder of the make-up material onto clothes, etc.

【Construction】 A water-in-oil type emulsification make-up material containing an ultraviolet-ray inhibitor comprises an organic denaturation clay mineral, a volatile component, spherical resin powder, and a coating agent.

【Claims】

【Claim 1】 A water-in-oil type emulsification make-up material containing an ultraviolet-ray inhibitor, comprising an organic denaturation clay mineral, a volatile component, spherical resin powder, and a coating agent.

【Claim 2】 A material according to Claim 1, where the amount of the organic denaturation clay mineral in the formulation is 0.1 ~ 1.5 % by weight.

【Claim 3】 A material according to Claim 1 or 2, wherein the amount of the volatile component in the formulation is 20 ~ 60 % by weight.

【Claim 4】 A material according to any one of Claims 1 to 3, wherein the amount of the spherical resin powder in the formulation is 0.5 ~ 20 % by weight.

【Claim 5】 A material according to any one of Claims 1 to 4, wherein the amount

of the coating agent in the formulation is 0.1 ~ 30% by weight.

【Claim 6】 A material according to any one of Claims 1 to 5, wherein the volatile component is one or two more agents selected from a group consisting of a straight chain-, branched-, or cyclic- hydrocarbon having a number of carbon atoms of 6 ~15, and silicone oil having a boiling temperature of 260 °C or less.

【Detailed Explanation of the Invention】

【0001】

【Industrial Applicable Field】

The present invention relates to a water-in-oil type emulsification make-up material containing an ultraviolet-ray inhibitor that which comprises an organic denaturation clay mineral, a volatile component, spherical resin powder, and a coating agent: according to the invention the emulsifying contents are stable even at high temperatures, the "elongation" on skin is light and the material is not sticky.

【0002】

【Prior Art】

It is known that a water-in-oil (hereinafter, shortened as "W/O") emulsification type formula has better water resisting and perspiration resisting ability in comparison to an oil-in-water (hereinafter, shortened as "O/W") emulsification formula. However, in a case where the water-in-oil emulsification formula is used for sun-care products, such as sunscreen, it is difficult to keep its emulsification stableness. Whereas, the stableness of the emulsification formula has been improved as is disclosed in the Japanese Preliminary Publication No. Sho 61-129033. However, there is a tendency for recently developed sunscreens to contain a high percentage of ultraviolet absorbers in the formulation. In such sunscreens, stability could be obtained by using an emulsification technique such as is disclosed in the Publication No. Sho 61-129033, however, its usability would be rather worse. That is to say, the "elongation" on skin is heavy and has a "sticky" feel when applied. Further, there are problems with such sunscreens, when the basic material containing the powder is used, it comes off the skin with physical friction and the powder adheres to clothes.

【0003】

【Task to be solved by the Invention】

The present inventor found that the above-mentioned problems in stability and usability could be solved with a water-in-oil type emulsification make-up material

containing an ultraviolet-ray inhibitor, which comprises an organic denaturation clay mineral, a volatile component, spherical resin powder, and a coating agent.

【0004】

【Means for solving the task】

Since the claims are repeated here, the translation is omitted.

【0005】

The detailed construction of the present invention will be explained below. The volatile component used in the present invention is either a hydrocarbon having a low boiling temperature, or silicone oil. As the hydrocarbon having a low boiling temperature, straight chain-, branched-, or cyclic- hydrocarbon having a number of carbon atoms of 6~15 is used: the boiling temperature of these hydrocarbons shows 260 °C or less under atmospheric pressure. More concretely, hexane, octane, decane, cyclohexane, isooctane, xylene, toluene, isoparaffin, etc. can be preferably used. Isoparaffin is the most preferably used in the present invention; Isoper H (manufactured by ESSO) is available on the market. As the silicone oil having a low boiling temperature, a silicone oil with a boiling temperature of 260 °C or less (under atmospheric pressure) is preferred; concretely speaking, dimethylpolysiloxanes, such as methylpoly (n=5) siloxane; or cyclodimethylpolysiloxanes, such as octamethylcyclotetrasiloxane, decamethylcyclopentasiloxane, and dodecamethylcyclohexasiloxane; can be named. In the present invention, one or two more volatile component(s) selected from the above may be used. The amount of the volatile component in the formulation is 20 ~ 60% by weight. When the amount in the formulation is less than 20%, the elongation on skin cannot be improved, while if the amount in the formulation is more than 60%, "oiliness" would appear.

【0006】

For use as the organic denaturation clay mineral in the present invention, a commercially sold cationic denaturation clay mineral, which is obtained with the preliminary treatment of a clay mineral having a water bloating tendency with a quaternary ammonium salt type cationic surface active agent, can be used. Benton38 (product name, manufactured by Leox) or Veegum Ultra (product name, manufactured by R.T.Vanderbilt C. Inc.) are well known as such organic denaturated clay minerals. It may also be possible to formulate a clay mineral having a water bloating tendency with a quaternary ammonium salt type cationic active surface agent; and then

performing the organic denaturation during the preparation. The amount of organic denaturation clay mineral in the formulation in the present invention is 0.1 to 1.5 % by weight, more preferably, 0.1 to 1.0 % by weight. When the amount in the formulation is less than 0.1 % by weight, it is impossible to keep the "stability" of the W/O type emulsification make-up material; therefore, no positive effect in stability could be obtained by adding the organic denaturation clay mineral. On the other hand, when the amount in the formulation is more than 1.5 % by weight, the viscosity of the basic material increases, causing the "elongation" to become heavy and usability is aggravated.

【0007】

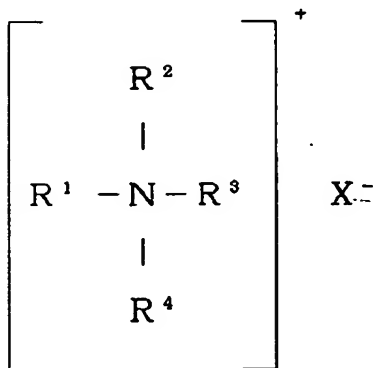
The clay mineral having a water bloating tendency that is used to prepare the organic denaturation clay mineral is a layer silicate mineral, which belongs to the smectite group. Generally, montmorillonite, beidellite, nontronite, saponite, hectorite, etc. can be named; either a natural or a synthesized layer silicate mineral can be used. Kunipia, Smecton (both manufactured by Kunimine Industrial), Veegum (manufactured by R.T.Vanderbilt C. Inc.), dimonite, fluorine-4-silicon silica (both manufactured by Topy Industrial Ltd.), laponite (manufactured by Laporte) are available on the market. For preparing the organic denaturation clay mineral, one or two more clay minerals having water bloating tendencies are arbitrarily selected from the above.

【0008】

The quaternary ammonium salt type cationic surface active agent that is used to prepare the organic denaturation clay mineral has a chemical structure as shown below.

【0009】

Chemical formula



【0010】

(In the above chemical formula, R1 represents the alkyl group having a number of carbon of 10 ~ 22, or the benzyl group, R2 represents the methyl group or the alkyl group having a number of carbon of 10~22, R3 and R4 represent the alkyl group having a number of carbon of 1~3, or the hydroxyalkyl group, respectively, and X represents the halogen atom or methylsulfate residue.)

【0011】

Specifically, dodecyltrimethyl ammonium chloride, myristyltrimethyl ammonium chloride, cetyltrimethyl ammonium chloride, stearyltrimethyl ammonium chloride, arachyltrimethyl ammonium chloride, behenyltrimethyl ammonium chloride, myristyldimethylethyl ammonium chloride, cetyldimethylethyl ammonium chloride, stearyldimethylethyl ammonium chloride, arachyldimethylethyl ammonium chloride, behenyldimethylethyl ammonium chloride, myristyldiethylmethyl ammonium chloride, cetyldiethylmethyl ammonium chloride, stearyldiethylmethyl ammonium chloride, arachyldiethylmethyl ammonium chloride, behenyldiethylmethyl ammonium chloride, benzyldimethylmyristyl ammonium chloride, benzyldimethylcetyl ammonium chloride, benzyldimethylstearyl ammonium chloride, benzyldimethylbehenyl ammonium chloride, benzylmethylethylcetyl ammonium chloride, benzylmethylethylstearyl ammonium chloride, distearyldimethyl ammonium chloride, dibehenyldihydroxyethyl ammonium chloride, and corresponding bromide, etc; in addition, dipalmitylpropylethyl ammonium methyl sulfate, etc. can be named. For preparing the organic denaturation clay mineral, one or more agent(s) is/are arbitrarily selected from the above.

【0012】

For use as the spherical resin powder in the present invention, polyamide resin powder (nylon powder), polyethylene powder, methyl polymetacrylate powder, polystyrene powder, styrene-acrylic acid copolymerizate resin powder, benzoguanamine resin powder, polytetrafluoride ethylene powder, cellulose powder, trimethylsilsesquioxane powder, etc. can be named. These powders may be subjected to hydrophobic treatment. For the hydrophobic treatment, a treatment whereby oil is absorbed on the surface of the powder, or the powder is made lipophilic by esterification or etherification by using a functional group, such as hydroxyl; a metallic soap treatment where zinc salt or magnesium salt of a fatty acid is used; a silicone treatment whereby dimethylpolysiloxane or methyl hydrogen polysiloxane is used; and a fluorine treatment whereby the powder is treated with a fluorine compound containing perfluoroalkyl; are

named. The amount of spherical resin powder in the formulation according to the invention is preferably 0.5 ~ 20 % by weight. When the amount is less than 0.5% by weight, a free-flowing feeling, which is caused by the spherical resin powder, cannot be obtained, however, when the amount is more than 20 % by weight, its usability becomes rough to the touch.

[0013]

For use as the coating agent in the present invention, a PVP series coating agent, such as polyvinyl pyrrolidone (PVP), PVP/dimethylaminoethylmethacrylate copolymerizate, PVP/eicosane copolymerizate, PVP/ethyl-methacrylate/methacrylate copolymerizate, PVP/hexadecen copolymerizate PVP/vinylacetate copolymerizate, and PVP/vinylacetate/itaconic copolymerizate styrene/PVP copolymerizate; an acrylic acid series coating agent, such as ethyl-acrylic/acrylicamido/acrylic copolymerizate, ethyl-acrylic/buthyl-acrylic copolymerizate, ethyl-acrylic/ ethylmethacrylate copolymerizate, ethyl-acrylic/methacrylate copolymerizate, ethyl-acrylic/methyl-methacrylate copolymerizate, octyl-acrylic/vinyl-acetate copolymerizate, octyl-acrylic/styrene copolymerizate, butyl acrylic/ vinyl acetate copolymerizate, butyl acrylic/ethyl-hydroxymethacrylate copolymerizate, butyl-acrylic/methyl-methacrylate copolymerizate, methoxyethyl-hydroxyethylacrylic acrylic/butyl-acrylic copolymerizate, lauryl-acrylic/vinyl-acetate copolymerizate, ethyl-polyacrylic, butyl-polyacrylic, and polystyrene acrylic resin; a vinyl acetate series coating agent, such as vinyl-polyacetate; a methacrylate series coating agent, such as methyl-polymethacryl, methyl-methacryl/butyl-acrylic/acrylic octyl acid, and vinyl-pyrrolidone diethylsulfate/N, N'-dimethylaminomethacrylic acid copolymerizate; an ether series coating agent, such as vinylmethylether/ethylmaleic copolymerizate, and vinylmethylether/butylmaleic copolymerizate; a styrene series coating agent, such as styrene/methylstyrene/indene copolymerizate; an alkyd resin series coating agent, such as cyclohexane-series alkyd resin; a silicon resin series coating agent, such as trimethylsiloxysilicic, can be used. The amount of coating agent in the formulation in the present invention is 0.1~30% by weight, or more preferably, 0.5~20%. When the amount in the formulation is less than 0.1 % by weight, the effect of the coating agent, which is preventing the powder from coming off with physical friction, or preventing the powder from adhering to clothes, etc. is not noticeable. While, when the amount in the formulation is more than 30% by weight, the coated feeling becomes uncomfortable, therefore its usability is aggravated.

【0014】

For use as the ultraviolet-ray inhibitor in the present invention, an ultraviolet-ray absorber or an ultraviolet-ray scatter for cosmetics is used. For use as the ultraviolet-ray absorber, a benzonc acid type ultraviolet-ray absorber, such as paraamino-benzonic acid (hereinafter, abbreviated as PABA), PABA monoglycerinester, N, N-dipropoxyPABA-ethylester, N, N-diethoxyPABAethylester, N, N-dimethylPABAethylester, N, N-dimethylPABAbutylester, and N, N-dimethylPABAmethylester; an anthranlyic type ultraviolet-ray absorber such as homomenthyl-N-acetylanthranilate; a salicylate type ultraviolet-ray absorber, such as amylsalicylate, menthylsalicylate, homomenthylsalicylate, octyl-salicylate, phenyl salicylate, benzylsalicylate, and p-isopropanol phenyl salicylate; a cinnamic acid type ultraviolet-ray absorber, such as octyl cinnamate, ethyl-4-isopropyl cinnamate, methyl-2,5-diisopropyl cinnamate, ethyl-2, 4-diisopropyl cinnamate, methyl-2, 4-diisopropyl cinnamate, propyl-p-methoxy cinnamate, isopropyl-p-methoxy cinnamate, isoamyl-p-methoxy cinnamate, octyl-p-methoxy cinnamate (2-ethylhexyl-p-methoxy cinnamate), 2-ethoxyethyl-p-methoxycinnamate, cyclohexyl-p-methoxycinnamate, ethyl- α -cyano- β -phenyl cinnamate, 2-ethylhexyl- α -cyano- β -phenyl cinnamate, glycerylmono-2-ethylhexanol-diparamethoxy cinnamate; in addition, a silicone series cinnamic acid derivative, such as 3, 4, 5-trimethoxy cinnamic acid 3-methyl-4-[methyl-bis(trimethylsiloxy) silyl; a benzophenone type ultraviolet-ray absorber, such as 2, 4-dihydroxybenzophenone, 2,2'-dihydroxy-4-methoxybenzophenone, 2,2'-dihydroxy-4,4'-dimethoxybenzophenone, 2, 2', 4, 4'-tetrahydroxybenzophenone, 2-hydroxy-4-methoxybenzophenone, 2-hydroxy-4-methoxy-4'-methylbenzophenone, 2-hydroxy-4-methoxybenzophnone-5-sulfonate, 4-phenylbenzophenone, 2-ethylhexyl-4'-phenyl-benzophenone-2-carboxylate, 2-hydroxy-4-n-octoxybenzophenone, and 4-hydroxy-3-carboxybenzophenone; silicon denatulation ultraviolet absorber, such as 3-(4-methyl benzylidene)-d, 1-camphor, 3-benzylidene-d,1-camphor, urocanic acid, urocanic acid ethylester, 2-phenyl-5-methylbenzoxazole, 2, 2'-hydroxy-5-methylphenylbenzotriazole, 2-(2'-hydroxy-5'-t-octylphnyl) benzotriazole, 2-(2'-hydroxy-5'-methylphenyl) beonzotriazole, dibenzarazine, dianisolemethane, 4-methoxy-4'-t-butylbenzolemethane, 5-(3,3-dimethyl-2-norbornylidene)-3-pentane-2-ON, etc.; and fluorine denaturated ultraviolet-ray absorber, can be used. However, it is not limited to the above.

【0015】

Further, for use as an ultraviolet-ray scatter, titanium oxide, zinc oxide, cerium oxide, and iron oxide can be used. The diameter of the particle thereof is not limited, so far as it effectively prevents ultraviolet-rays. Furthermore, all kinds of surface treatment may be applied; a composite treatment may be applied on a mica, etc.

【0016】

In the present invention, a non-ionic surface active agent having a HLB value of 2 to 16 is acceptable for use as the emulsification agent, but preferably, a HLB value of 3 to 12 should be used. Specifically, it is preferable to use a polyol fatty acid ester type surface active agent as is mentioned below: an ether type surface active agent, such as polyoxyethylen 2~30 mol-added (hereinafter, abbreviated as "POE(2~30)") oleylether, POE(2~35) stearylether, POE(2~20) laurylether, POE(1~20) alkylphenylether, POE(6~18) behenylether, POE(5~25) 2-decylpentadecylether, POE(3~30) 2-decyltetradecylether, POE(8~16) 2-octyldecylether, etc.; an ester type surface active agent, such as POE(4~60) hardened castoroil, POE(3~14) fatty monoester, POE(6~30) fatty diester, POE(5~20) solbitan fatty ester, etc.; an ethylene oxide added type surface active agent, such as POE(2~30) glycerylmonoistearate, POE(10~60) glyceryltri-isostearate, POE(7~50) hardened castoroil mono-isostearate, POE(12~60) hardened castoroil tri-isostearate, etc.; a polyglycerine fatty acid ester, such as decaglyceryltetraoleate, hexaglyceryltri-isostearate, tetraglyceryldi-isostearate, diglycerylisostearate, etc.; a glycerine fatty acid ester such as glycerylmonostearate, glycerylmono-isostearate, and glycerylmonooleate. In particular, an ethyleneoxide added type non-ionic surface active agent is preferable for use as is mentioned below; a polyglycerine fatty acid ester above diglycerine, such as decaglyceryltetraoleate, hexaglyceryltri-isostearate, tetraglyceryldi-isostearate, and diglycerylisostearate; a POE added ether type active agent, such as POE(2~12) oleylether, POE (3~12) stearylether, POE (2~10) laurylether, POE(2~10) nonylphenylether, POE (6~15) behenylether, POE(5~20) 2-decylpentadecylether, POE (5~17) 2-decyltetradecylether, and POE (8~16) 2-octyldecylether; a POE added ester type active agent, such as POE (10~20) hardened castoroil, POE (5~14) oleic acid monoester, POE (6~20) oleic acid diester, (POE(5~10) solbitan oleic acid ester, etc.; and a POE added etherester type active agent, such as POE (3~15) glycerylmono-isostearate, POE (10~40) glyceryltri-isostearate. Furthermore, polyoxyalkylene denaturated organopolysiloxane can also be used. In order to realize the present invention, one or more non-ionic surface active agent(s) is/are arbitrarily selected from the above.

[0017]

In addition to the above-mentioned essential components, additional component(s), which is/are normally formulated for cosmetics or medical products may be added as the occasion demands within the scope of the invention. For instance, a solid or semi-solid oil component, such as Vaseline, lanolin, ceresin, microcrystalline wax, carnauba wax, candelilla wax, higher fatty acid, higher alcohol, etc.; a fluid oil component, such as squalane, fluid paraffin, ester oil, diglyceride, triglyceride, silicone oil, etc.; a fluorine type oil, such as perfluoro polyether, perfluorodecalin, perfluoro-octane, etc.; a water-soluble polymer, oil-soluble polymer, a surface active agent, a non-organic and organic pigment; an organic coloring agent; a preservative; an anti-oxidant; a dyestuff, a thickening agent, a pH adjustor, a scent, a humectant, a drug, a sequestrater, an extinguishing agent, an astringent, an amino-acid and a salt thereof, a dispersant, etc.

[0018]

The present invention will be explained in more detail by referring to the embodiments. It should, however, be noted that the present invention is not limited to these embodiments.

[Embodiment 1, Comparative Examples 1 to 3] W/O cream
Composition

Material	Embodiment 1	Comparative Example 1	Comparative Example 2	Comparative Example 3
	% by weight	% by weight	% by weight	% by weight
(1) decamethylcyclopentasiloxane	28	28	—	28
(2) silicone resin	3	3	3	3
(3) cetyliso-octarate	2	2	30	2
(4) polyoxyethylene - methylpolysiloxane copolymerizate	2	2	2	2
(5) octylmethoxycinnamate	7	7	7	7
(6) 2-hydroxy 4-methoxybenzophenone	0.5	0.5	0.5	0.5
(7) 4-tert-butyl-4'-methoxybenzoylmethane	0.5	0.5	0.5	0.5
(8) vitamin E acetate	0.05	0.05	0.05	0.05
(9) paraben	appropriate	appropriate	appropriate	appropriate
(10) scent	appropriate	appropriate	appropriate	appropriate
(11) organic denaturated clay mineral (Benton 38)	0.5	0.5	0.5	—
(12) hydrophobic titanium oxide	2	2	2	2
(13) nylon powder	8	—	—	8
(14) hydrophobic talc	—	8	8	—
(15) dipropylene glycol	5	5	5	5
(16) EDTA · 3Na · 2H ₂ O	0.1	0.1	.1	0.1
(17) purification water	rest	rest	rest	rest

Preparation

The materials (1) to (11) were heated up to a temperature of 70°C and dissolved; then

the materials (12) to (14) were added and mixed in a dispersion mill (the oil phase). Further, the materials (15) to (17) were mixed together and heated up to 70°C; then gradually added into the oil phase, stirring in a dispersion mill so as to sufficiently mix them; then they were cooled down.

【0019】

[Evaluation of stability]

The obtained material was filled into three glass bottles; they were then left for one month, with one kept at 0°C, one at room temperature, and one at 50°C, after which time they were evaluated. The evaluation was carried out with the three grades mentioned below.

- no separation appeared
- △ little separation appeared
- × remarkable separation appeared

[evaluation of usability (elongation)]

Ten specialized subjects actually used the thus prepared material to carry out an organoleptic evaluation. The evaluation result was represented by the following marks.

- ◎ 8 or more subjects said "good"
- 6 or more subjects said "good"
- △ 4 or more subjects said "good"
- × 4 or less subjects said "good"

[evaluation of usability (stickiness)]

Ten specialized subjects actually used the prepared material to carry out an organoleptic evaluation. The evaluation result was represented by the following marks.

- ◎ 8 or more subjects said "good, no stickiness"
- 6 or more subjects said "good, no stickiness"
- △ 4 or more subjects said "good, no stickiness"
- × 4 or less subjects said "good, no stickiness"

[evaluation of usability (secondary adhesion of the powder)]

Ten specialized subjects actually used the prepared material to carry out an evaluation. The evaluation result was represented by the following marks.

- ◎ 8 or more subjects said "good, no coming off or adherence to clothes"
- 6 or more subjects said "good, no coming off or adherence to clothes"
- △ 4 or more subjects said "good, no coming off or adherence to clothes"
- × 4 or less subjects said "good, no coming off or adherence to clothes"

【0020】

[Evaluation result] Evaluation of stability and usability was conducted using the above-mentioned methods for embodiment 1 of the present invention and the comparison examples 1 to 3. Table 1 shows the evaluation results.

【0021】

【Table 1】

Item	Embodiment 1	Comparison Example 1	Comparison Example 2	Comparison Example 3
Stability 0℃	○	○	○	×
RT	○	○	○	△
50℃	○	○	○	×
Usability (elongation)	◎	△	△	○
Usability (stickiness)	◎	△	△	○
Usability (adhesion)	○	○	○	△

【0022】

[Embodiment 2] W/O emulsion

Composition

(1) octamethylcyclotetrasiloxane	41% by weight
(2) liquid paraffin	3
(3) polyoxyethylene · methylpolysiloxane copolymerizate	3
(4) octylmethoxycinnamate	3
(5) silicone resin (specifically)	20

(6) distearyldimethyl ammonium chloride	0.3
(7) vitamin E acetate	0.02
(8) paraben	appropriate
(9) scent	appropriate
(10) spherical polyethylene powder	2
(11) hydrophobic talc	5
(12) glycerin	4
(13) smecton	0.5
(14) sodium methaphosphate	0.03
(15) purification water	rest

Preparation

The materials (1) to (9) were heated up to a temperature of 70°C and dissolved; then the materials (10) to (11) were added and mixed in a dispersion mill (the oil phase). Further, the materials (12) to (13) were moistened and mixed together with (14) to (15), and heated up to 70°C; then gradually added into the oil phase, stirring in a dispersion mill so as to sufficiently mix them; they were then cooled down.

【0023】

[Embodiment 3] W/O cream

Composition

(1) light duty isoparaffin	7% by weight
(2) decamethylcyclopentasiloxane	18
(3) glyceryl monooleate	1.5
(4) diglyceryldi-isostearate	2.1
(5) distearyldimethylammoniumchloride	0.4
(6) octylmethoxycinnamate	5
(7) paramethoxycinnamic-acid isopropyl	5
(8) squalane	5
(9) polymeric dimethylpolysiloxane	5
(10) paraben	appropriate
(11) scent	appropriate
(12) trimethylsilsesquioxane powder	20
(Product name: Tospal 145)	

(13) 1,3-butylene glycol	7
(14) montmorillonite	1
(Product name: Kunipia G-4)	
(15) glycyrrhizin acid dipotassium	0.05
(16) EDTA · 3Na · 2H ₂ O	0.05
(17) purification water	rest

Preparation

The materials (1) to (11) were heated up to a temperature of 70°C and dissolved; then the material (12) was added and mixed in a dispersion mill (the oil phase). Further, the materials (13) to (14) were moistened and mixed together with (15) to (17), and heated up to 70°C; then gradually added into the oil phase, stirring in a dispersion mill so as to sufficiently mix them; they were then cooled down.

【0024】

[Embodiment 4] W/O emulsion

Composition

(1) decamethylcyclopentasiloxane	20% by weight
(2) octamethylcyclotetrasiloxane	20
(3) methylpolysiloxane (SiliconKF-96A)	4
(4) POE glycerol riisostearate	0.5
(5) octylmethoxycinnamate	3
(6) 3,4,5-trimethoxycinnamic-acid 3-methyl-4-[metyl-bis(trimethysiloxy)silyl]	3
(7) organic denaturated clay mineral (Product name: Benton 38)	0.3
(8) silicone resin (by Toray Dow Corning Co., Ltd.)	12
(9) paraben	appropriate
(10) scent	appropriate
(11) vitamin E acetate	0.05
(12) hydrophobic titanium oxide	2
(13) methyl polymethacrylate powder	5

(14) glycerin	5
(15) purification water	rest

Preparation

The materials (1) to (11) were heated up to a temperature of 70°C and dissolved; then the materials (12)~(13) were added and mixed in a dispersion mill (the oil phase). Further, the materials (14) to (15) were mixed together and heated up to 70°C; then gradually added into the oil phase, stirring in a dispersion mill so as to sufficiently mix them; they were then cooled down.

【0025】

[Embodiment 5] W/O cream

Composition

(1) decamethylcyclopentasiloxane	30% by weight
(2) cetylisooctanoate	8
(3) vaseline	2
(4) solid paraffin	0.5
(5) octylmethoxycinnamate	6
(6) 4-tert-butyl-4'-methoxybenzoylmehane	0.1
(7) distearyldimethylammoniumchloride	0.5
(8) polyoxyethylene · methylpolysiloxane copolymerizate	3
(9) polyvinylpyrrolidone -- eicosane derivative	0.5
(10) paraben	appropriate
(11) scent	appropriate
(12) hydrophobic zinc oxide	5
(13) spherical polyethylene powder	0.5
(14) 1,3-butylene glycol	4
(15) smecton	0.8
(16) purification water	rest

Preparation

The materials (1) to (11) were heated up to a temperature of 70°C and dissolved; then the materials (12)~(13) were added and mixed in a dispersion mill (the oil phase). Further, the materials (14) to (15) were moistened and mixed together with (16) and

heated up to 70°C; they were then gradually added into the oil phase, stirring in a dispersion mill so as to sufficiently mix them; they were then cooled down.

【0026】

【Effects of the Invention】

According to the invention, in which a water-in-oil type emulsification make-up material containing an ultraviolet-ray inhibitor, comprising an organic denaturation clay mineral, a volatile component, spherical resin powder, and a coating agent, when the emulsification is applied on skin, a light "elongation" can be attained, stickiness is reduced, and the powder does not come off. Further, the water resistance and the stability are remarkably improved.